



Volume 15, No. 9

October, 1964

WORTHIE M. RAUSCHER NEW MAC AIRPORT ENGINEER

On September 1, Worthie M. Rauscher took over duties with the Airports Division of the Montana Aeronautics Commission as an Airport Engineer.

Worthie's duties will consist of new airport design, site investigations, preliminary surveys of airport locations, engineering drafting and drawing and meeting with local airport boards on airport development. He will be working with Vernon Moody who has been an airport engineer with the Commission for the past three years.

Worthie, familiar to a great number of persons in the Montana Aviation Industry, was associated with the Commission and city/county groups on numerous airport projects while employed by Wenzel and Company, Consulting Engineers in Great Falls, as engineer and pilot, previous to joining the MAC staff.

Worthie is a native Montanan, born in Great Falls, he attended schools in Stanford and received his BS degree in Mechanical Engineering from Montana State College.

Serving as a pilot in the U. S. Air Force for over 5 years, Worthie was

stationed at Malmstrom AFB at the time of his discharge in 1958.

At the present time, he holds a Commercial Pilot's Certificate for single and multi-engine.



Worthie Rauscher

The Rauschers and their three children reside at 1215 Peosta in Helena.

PILOTS ATTENTION!! KALISPELL SERVICE TEST AREA HI-SITE FREQUENCY CHANGE!!

From 124.9 MCS to 120.4 MCS

**Became Effective
September 1, 1964**

"Wally Patefield Winner of 1964 Aviation Mechanics Award"

Mr. Wally Patefield, an employee of Skyway Aircraft Repair at Great Falls International Airport has been selected by the nominating committee for the FAA Aviation Mechanic Safety Award for the year 1964. Wally's contribution was within the guidelines established by the FAA for the suggestion or development of a maintenance and/or inspection procedure during 1964 that contributed significantly to safety in aviation.

Wally fabricated a tool utilizing a whistle method to locate the compression stroke and top dead center of a particular aircraft engine cylinder. This is necessary at inspections and overhauls for magneto timing, setting valves, trouble shooting procedures, running compression checks etc. Usually mechanics use their thumbs to detect the compression stroke and then locate top dead center by sticking a screwdriver through the spark plug hole to locate the position of the piston. After the general position is found the factory approved timing method using a protractor is put into play. In some cases this requires two mechanics, one to turn the propeller and another to hold his thumb over the plug port. Also, sticking a screwdriver through the spark plug port

(Continued on page 2, column 1)

Official Monthly Publication
of the
**MONTANA AERONAUTICS
COMMISSION**

Box 1698
Helena, Montana

Tim Babcock, Governor

Charles A. Lynch, Director

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Walter Hope, Vice Chairman
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Herb Jungemann, Member
E. B. Cogswell, Member
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DIRECTOR'S COLUMN



"HERE WE GO AGAIN"

I would like to take this opportunity to quote Bulletin No. 64-09 recently released by the Washington Staff of the National Aviation Trades Association, on the proposed New Part 137 (formerly Part 55.)

"PROPOSED RULES FOR AGRICULTURAL AIRCRAFT OPERATIONS PUBLIC HEARING TO BE HELD."

The Federal Aviation Agency will hold a public hearing November 5 at 10 a.m. in Oklahoma City to obtain views on proposed rules governing the safety of agricultural aircraft operations.

At present, there are no Federal rules specifically applicable to agricultural aircraft operations. Such operations are governed by an FAA Certificate of Waiver which authorizes the operator to deviate from existing air traffic rules when conducting aerial spraying.

With approximately 2,500 operators and over 5,000 aircraft now engaged in these increasing activities, FAA has proposed rules to assist operators in conducting their activities safely and efficiently.

Under the proposed rules, operators and pilots would be required to pass test of their knowledge of agricultural materials and chemicals, including

poisons, and competence in dispensing them. In addition, operators would be required to give proof of the airworthiness of their aircraft and pilots would have to demonstrate safe operational techniques in aerial application.

Two new FAA Certificates would be issued, one for private and the other for commercial agricultural aircraft operator. Applicants for the private operator certificate would be required to have services of at least one pilot holding a current commercial or airline transport pilot certificate and a rating for the aircraft to be used. The applicant himself may be the pilot. Both private and commercial operators would be required to own at least one certificated, airworthy aircraft specifically equipped for agricultural operation, including shoulder harnesses for the pilot and, if used, the co-pilot. If the applicant is not the owner of the aircraft, the aircraft would have to be under exclusive lease to him for at least six consecutive months.

Knowledge and skill tests would be waived if the applicant held a current operating waiver at the time he applied for the certificate. Evidence would have to be given, however, of a record of safe flight operations and competence as an aerial applicator.

Proposed operating rules include restrictions against hazardous dispensing of agricultural chemicals and poisons and procedures for operating with in airport traffic areas and control zones, operating over congested and non-congested areas and operations conducted with single-engine multi-engine aircraft. Proposed rules also spell out aircraft weight restrictions and aircraft inspection requirements.

Certificated commercial aircraft agricultural operators would be required to keep current records on their operations for at least 12 months and submit them to FAA on request. They would also have to furnish an annual report of their operations to FAA upon request.

The proposals to be discussed at the hearing are based on a Notice of Proposed Rule-Making (Notice 62-47, Part 55), dated November 1, 1962. They reflect changes from the original proposal resulting from a study of the comments received and further analysis of the problems involved.

The hearing will be held at the FAA Aeronautical Center, Civil Aero-

medical Research Institute Conference Room, Will Rogers Field, Oklahoma City.

Oral statements and written comments on the proposed rule-making may be submitted before October 26 to FAA Rules Docket, Washington, D.C.

Attn: Presiding Officer, Public Hearing on Notice 62-47.

CALENDAR



CALENDAR

October 2-3-4, Lewistown, Montana—Flying Farmer's Convention—Registration 8:00 a.m. to 12:00 noon Saturday—Interesting speakers and a fine program have been arranged.

October 4, Cut Bank, Montana—Montana Pilot's Association, Cut Bank Hangar, will hold its annual MPA Day! Free rides to all that attend. Entertainment and Food Concession!!

October 3-10, Texas—The 16th Annual ALL TEXAS AIR TOUR. Interested persons write: All Texas Air Tour 204 West 16th Street, Austin, Texas, U.S.A. for information and reservations.

October 7, Helena, Montana—Montana Aeronautics Commission Meeting.

October 12-13-14, Rapid City, South Dakota—NASAO National Convention.

October 17, Helena, Montana—Dedication of Helena Administration Building. (See Article)

October 21, Helena, Montana—Search and Rescue Coordinators Meeting.

October 19-20-21, Norman, Oklahoma—National Airports Conference to be held at the University of Oklahoma. This conference is jointly sponsored by the University and the American Association of Airport Executives.

October 24-25, Ennis, Montana—Montana Pilot's Association. (See Article)

November 29, Helena, Montana—Registration for Aviation Mechanics Refresher Seminar to be held in MAC offices on the Helena Airport.

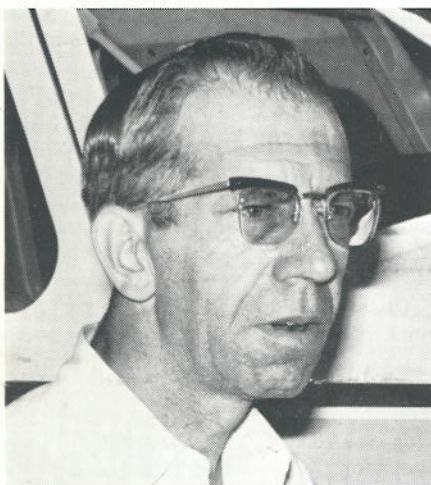
November 30-December 7, Helena—Second Aviation Mechanics Refresher Seminar.

W. PATEFIELD WINNER—

(continued from page 1, column 3)
could result in damage to the piston or the spark plug insert.

Wally adapted a whistle to a spark plug shell which is then screwed into the desired cylinder spark plug port. The piston coming up on compression stroke will blow the whistle, no matter how slight the movement of the piston as long as the piston is moving upward.

The use of the tool eliminates the shade tree method of locating the compression stroke and general top dead center position and the use of the second mechanic resulting in considerable saving of time and money to the customer.



Wally Patefield, '64 Award winner.

As the Montana winner, Wally will be eligible for consideration for the FAA Central Region Award. He is in competition with the winners from 12 other states for a Regional Trophy and a trip to Kansas City for the presentation sometime during the latter part of October. Out of the 7 Regional awards a National winner is selected who will receive the national trophy during a trip to Washington, D.C. during the month of December.

Governor Babcock will present the State Trophy to Wally in a ceremony at the State Capitol during the month of October.

Wally started in the aviation mechanic industry during the year 1955 as a mechanic helper at Skyway Flying Service in Great Falls. Wally applied himself to his work and spent many spare hours studying the manuals and other related study guides to prepare himself for the mechanic tests leading to his A&P certificates.

He received his engine certificate during 1959 and his airframe certificate during 1962.

Wally, a native Montanan, was engaged as an automobile and truck mechanic since 1942 prior to going to work for Skyways. He is 42 years old, is married, has two daughters, and one son and lives at 1508 Fifteenth Street South in Great Falls.

The FAA Aviation Mechanic Safety Award Program, started in 1963 to give recognition to the aviation mechanic segment of the aviation industry for its continued efforts in safety in aviation, is conducted within the State of Montana through the joint effort of the Montana Aeronautics Commission, the Montana Aviation Trades Association and the FAA General Aviation District Offices located in Billings and Helena.

By:

Lee C. Mills

FAA Flight Standards

Liaison Representative

MPA FALL FLY-IN October 24-25, 1964

The Montana Pilot's Association postponed its annual fall fly-in, scheduled for September 26th and 27th, in order that all its members could attend the INAC in Helena. The fly-in will be held October 24th and 25th.

Only the dates were changed—the agenda is the same, **fun, good company and many surprises.**

Remember, get in the spirit of the theme for the fly-in, **"The Underworld!!!"**

For advance reservations, contact: Otis Crooker, Sportman's Lodge, Ennis. (Bring your own tie-downs).

MPA members, let's have the largest turn-out ever!!! Plan now to attend!!! Join the Underworld crowd, October 24 and 25 at the Sportsman's Lodge, Ennis, Montana.

See You There!!!!

HELENA AIRPORT CAFE REOPENED

Elizabeth "Bitty" Herrin, owner of Morrison's Flying Service, announces that the Airport Cafe (located in Morrison's building) is **"Open for Business"!!** The Cafe, recently re-opened by Doris Wiseman, assisted by Betty Shepard, has been remodeled, everything is new and shiny and the food is great. While flying in the Helena area, be sure to stop at the Airport Cafe!!!!

HELENA'S NEW FAA BUILDING TO BE DEDICATED

The new \$85,000 FAA Office Building on the Helena Airport will be dedicated on October 17. Open House will be held from 1:00 p.m. to 3:00 p.m. Among the participants in the dedication ceremonies will be Edward Marsh, Director of the FAA Central Region Office, Kansas City, Missouri; Helena's Mayor, John Schroeder; members of the City/County Airport Board; Lewis and Clark County Commissioners, and Montana Aeronautics Commissions officials. The Waddell Construction Company of Helena, was the Contractor and Lee McKindree, Architect. Airport Manager, Hugh Kelleher, informs us that the dedication will be the climax of a four-year planning period.

The new building was financed with funds loaned by the MAC to the City/County Airport Board on a 10 year repayment plan and will be repaid to the Commission through office rentals. The new building, leased by the Board to the U.S. Governments' General Services Administration was leased by General service to the Federal Aviation Agency's local offices. Located in the new building are:

The District Airport Engineer, W. R. Pearson and Staff. District 9's General Aviation District Office (GADO). Lee Mills, Supervising Inspector, and Staff. Area Office of System Maintenance Sector, Charles Story and Staff.

The completion of the building, containing 4,000 feet of floor space, has made it possible for a definite improvement in facilities in the tower/administration building, giving the Tower/Flight Service Station operation a training classroom in addition to necessary office space and the Airport Board a much needed conference room on the ground floor adjacent to the Airport Manager's Office.

The Tower/Administration Building now houses the following:

Tower/Flight Service Combined Operation Facilities, Chief Lud Hodge and Staff.

The U.S. Weather Bureau, Mr. Dick Dightman, Chief and Staff.

The Airport Manager's Office and Airport Board Meeting Room.

Western Airlines and Northwest Airlines Facilities.

A CASE IN POINT

By: Charles A. Smith
Commission Attorney

"A VIOLATION OF FEDERAL FLYING REGULATIONS."

While defendant was proceeding in private airplane to Detroit, Michigan, he obtained a United States weather station forecast. This forecast stated that during that afternoon there would be broken ceiling (i.e., a cloud layer covering five to nine-tenths of the sky) of 2,500 feet.

Defendant and his passenger proceeded to Detroit, flying under visual flight rules above the cloud layer which became over-cast (i.e., a cloud layer covered nine-tenths or more of the sky) on route. Upon arrival he searched for "about an hour" for a hole in the cloud layer and then contacted a nearby approach control by radio. He advised that he was not qualified to fly on instruments and had only an hour fuel supply remaining. After some discussion, approach control arranged for a commercial airliner to rendezvous with defendant and guide him in, which resulted in his safe landing.

Thereafter, the defendant was charged with a violation of Section 43.65 of Civil Air Regulations for the flying in weather conditions less than the minimums prescribed for flight under visual flight rules while he did not hold a currently effective instrument rating. In addition, defendant was charged with operating his aircraft carelessly so as to endanger the life and property of others, in violation of Section 60.12 of Civil Air Regulations.

The defendant argued that even if this operation had been careless or reckless, it could not have endangered "the life or property of others" within the meaning of Section 60.12, Civil Air Regulations, because he was flying in his own aircraft. The court did not give much weight to this line of reasoning, since it fails to take into account the fact that, assuming carelessness and negligence, the life of defendant's passenger was definitely endangered, as were the lives and property of other operators and passengers in the vicinity. The court felt that even if it were conceded that radar control afforded the latter full protection from mid-air collision, the fact remained that the lives and properties of others in the vast metropolitan area over which defendant was operating were endangered. In addition,

consideration was given to the fact that defendant spent an hour over Detroit before contacting authorities and at that time, he still had an adequate fuel supply to make alternate destinations available.

In view of the foregoing, the court concluded that the defendant had violated the two provisions of the Civil Air Regulations and, therefore, affirmed the order of the Civil Aeronautics Board suspending his Airman Certificate for six months. (Brown vs. C.A.B., United States Court of Appeals, 1963).

Author's Note: All pilots in the U.S. must comply with the Civil Air Regulations. Therefore, if similar event occurs in Montana, the same result can be expected to follow.

AIRPORTS NOTES



By: James H. Monger
Assistant Director, Airports

Lincoln—The new state, federal airport project at Lincoln is now open and ready for traffic until snowfall closes it later this year. All that remains to complete this project is the placement of the double bituminous surface on the runway, which has been suspended due to the lateness in the year for oiling operations. This will be completed next year as soon as weather permits.



Final approach view of Lincoln, looking northwest.

Richey—The new General Aviation Utility Airport at Richey was dedicated at public ceremonies at 1:00 p.m. on October 3, 1964. Local county and state officials were in attendance. A lunch was served to all of those flying in. The total construction cost on this airport was \$16,076. The airport was sponsored by Dawson County.

Ryegate and Lavina—Airports at Ryegate and Lavina have been completed by contractor Gus Albert of Miles City. These two airports are now opened for traffic. The Airports were both sponsored by Golden Valley County.

Elliott Field—Elliott Field, the emergency recreational airport on Rock Creek, near Clinton, Montana, was recently fenced by the MAC maintenance crew. It was felt that the electric fence was necessary to keep the cattle off the runway during the fall and winter months when cattle are fed in that area. This airstrip is usually plowed by the Highway crews during the winter months, as the airport serves as a satellite field for Missoula County Airport when it is fogged in.

Chester—The Liberty County Airport at Chester, Montana, recently received a new double seal coat project on its runway, taxiways, and apron. The total cost of this double seal job was \$17,765.96. The contractor doing the work was Robert Tindall, Construction of Lewistown. The Liberty County Airport Commission borrowed \$5,000 from the MAC to help finance this local, state, and federal project.

Poplar—Hilling Construction Co. is now under way with an airport redevelopment project at Poplar. The airport is presently under construction and closed to all traffic. The project will consist of grading and paving the eastwest runway. There will also be a paved taxiway and apron. The plan indicates that the airport dirt work will be completed this fall, and then will be re-opened for the winter months and paved next year.

Broadus—This office has received a large number of inquiries relative to the proposed airport at Broadus. Engineering has been completed on the new Broadus Airport and it is hoped that it can be advertised for bids later this fall. Local attorneys are now working toward clearing the title for the airport property in question. As soon as the property is legally cleared an advertisement for bids for

construction will be held.

Culbertson—A public meeting was held in Culbertson on September 9, 1964. In attendance at this meeting were people from Culbertson, Poplar, Wolf Point, and throughout Roosevelt County. The purpose of the meeting was to discuss the proposed project for the re-development of the Culbertson Airport. A need is very apparent for a longer and paved runway at Culbertson. The project would be rather extensive, therefore, requiring funds from the local airport board, the MAC, and the FAA. Financing methods and the local airport board budget were the main items of discussion. County officials were in attendance and many questions and comments were made pertaining to the airport project. It is now hoped that the county and city officials will see their way clear to borrow the necessary money from the Montana Aeronautics Commission to match the Federal Aviation Agency grant for the total airport re-development. The project is presently under a preliminary engineering and feasibility study. Phase construction may have to be used, the study will determine this.

West Yellowstone—Paving has been completed on the new West Yellowstone Airport. The Administration Building is still under construction and will be completed January 1, 1965. This new airport will not be kept open during winter months, but will open every spring as soon as weather permits. The official dedication for the airport opening will be held in mid June of 1965. The old airport at West Yellowstone will remain open through this fall and will not re-open thereafter. The old airport will be abandoned upon the official commissioning of the new airport.

Missoula—A local federal project is pending on the Missoula County Airport. The FAA has approved a grant in the amount of \$97,170, to cover 53.08% of the cost. The extensive project will consist of the following work:

Re-construct the eastwest runway as a taxi-strip.

Overlay the northwest end of runway (11/29).

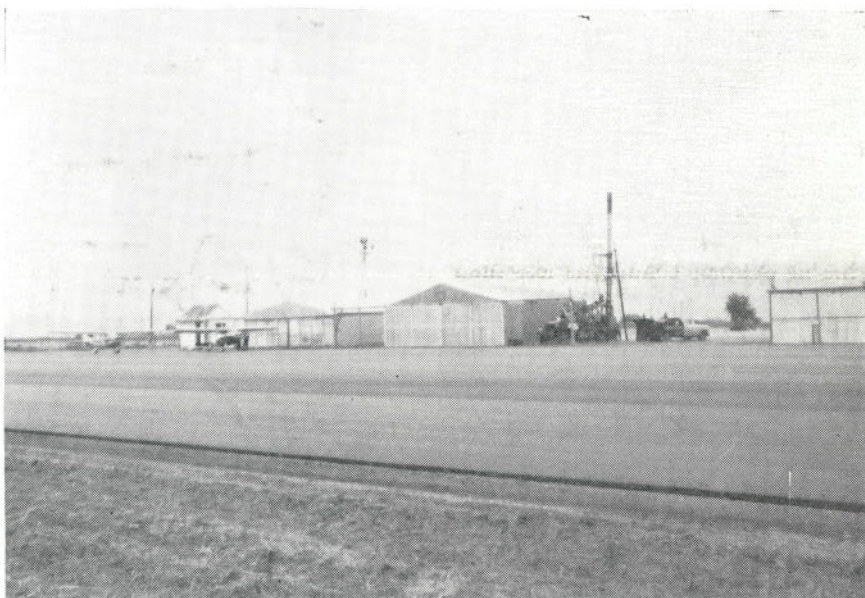
Purchase land for clear zone easements.

Construct maintenance and equipment building.

Townsend—The Townsend Joint City-County Airport Board recently



Terminal Building under construction at West Yellowstone.



View of the new asphaltic overlay on Townsend runway.

borrowed \$14,000 from the MAC for a ten year period to finance a runway overlay project. Contractor on this project was Schultz and Lindsey. The local, state project consisted of overlaying the runway 72 feet wide by 4,150 feet long, along with constructing an aircraft parking apron, 125 feet by 350 feet. The Townsend airport is currently going under a complete reconstruction program and it is planned in the near future to light the runway. The beacon tower has been moved several hundred feet to a new location where it is no longer a hazard. A well has been drilled and fueling and telephone facilities in-

stalled. This project was completed early in September (see photograph).

Billings — Airport Improvements—

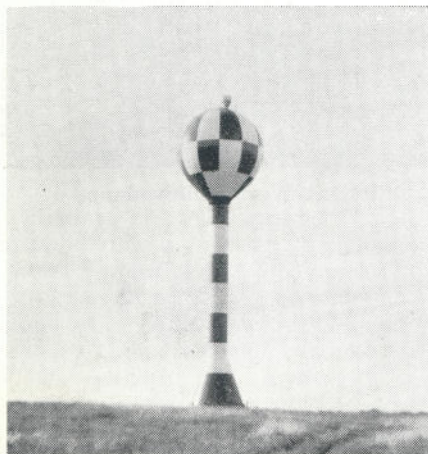
Logan Field at Billings is one of the two most active airports in Montana in the amount of traffic and in the amount of new construction and airport projects taking place. Work underway or completed recently within the last two years, totals \$3,093,000 of this \$208,000, has been invested by private enterprise and \$2,500,000 by the United States Air Force. The remaining \$385,000 from local, state and federal allocations. Some of the projects underway at the present time are as follows:

1. An extension on the Administration Buildings to increase office space—cost \$25,000—financed through a loan from the Montana Aeronautics Commission.

2. New fixed base operator hangar building—Cost \$80,000 financed by private funds.

3. Construction of T-hangar parking apron on west end of the airport—cost \$40,000—local, federal project.

4. 100,000 gallons storage tank for airport water facility—cost \$200,000—financed by a \$100,000 MAC loan and remaining through an FAA grant.



Billings, Montana, Logan Field, water system, 100,000 gallon tank.

5. Reconstruction of airport terminal building parking lot—cost \$30,000 financed through private enterprise.

6. Reconstruction of north half of northsouth runway—cost \$120,000—local, federal project.

7. Construction of new small aircraft engine repair shop—private enterprise—cost \$20,000.

8. Recently constructed complete underground field storage tank farm—cost \$78,000—financed by private enterprise.

9. Development of site for air defense command disbursal base—cost \$2,300,000—completion date will be April 1965. Along with the above projects that are recently completed or now underway the Billings Airport Commission has planned for the following projects for the coming year, totaling \$208,500.

1. Rebuild high intensity runway lighting system at the cost of \$36,000.

2. Reconstruct the north half of runway 4/22 for \$150,000.

3. Replace wind cone and segmented circle—\$2,500.



Logan Field, Billings. General aviation hangar under construction by Gillis Aviation.



Administration Building, Logan Field. Upper left hand corner of the building is the new addition.

4. Construct new taxiway for \$10,000.

5. Addition to restaurant—\$10,000.

It is very obvious to see that Billings is always one of the more progressive airports in the northwest because of its ever continuing modernization program.

FOR SALE: Cougar, Lycoming O-235C—100 H.P. 200 hrs on airframe—615 hrs on engine. Sharp! Always Hangared. PRICE \$2,000—No Trades. CONTACT Paul Thurmond, 2930 Wynne, Butte, Montana.

FOR SALE: Cessna 120—Full Electrical System—Basic Panel—Razor Backed covered wings—Recovered in 1963—350 hours since major—New Paint 1963—jump seat, Radio, Narco—Low frequency receiver—Hi-frequency transmitter—Price: \$2,500.00. Contact: Gerold Ohs, Malta, Montana—Phone 021-J-3.

Letters to the Director

Dear Mr. Lynch:

On September 17, 1964, the Federal Aviation Agency will inaugurate the new modified airway/route system. This means that the present three level structure will be reduced to two with the elimination of Intermediate Airways. In addition there will be the area above Flight Level 450 to serve flights capable of direct operations at high altitudes. The Airway/Route Plan embodies the following structural, spacing, and width concepts:

1. **AIRWAYS (V).** This structure is designed to serve short and medium range flights operating at 17,500 feet MSL and below, including transition to and from the Jet Route Structure.

a. **Navigational aid** spacing is normally 80 nautical mi.

b. **Airway width** is 8 nautical miles, 4 miles either side of the centerline and including the additional airspace between intersecting lines diverging from the airway centerline at adjacent facilities and extending until they intersect at the bisector of the angle of the center line/s of the airway at the changeover point established for that airway segment. Lines diverging at 4.5° either side of the centerline from the facility farthest from the changeover point govern the points of the intersection of the diverging lines.

2. **JET ROUTES (J).** This structure is designed to serve operations from Flight Level 180 to Flight Level 450 inclusive, including transition to and from other structures.

a. **Navigational aid** spacing is normally 260 nautical miles.

b. **Jet routes** are designated without width; however, alignment is planned using widths specified for Airways to prevent overlapping with other jet routes or special use airspace.

3. **HIGH ALTITUDE LEVEL. (HAL).** This area is designed to serve flights above Flight Level 450 which have the capability for direct operations within this environment.

a. **Navigational aids** are those designated to support the jet routes.

Simultaneously the following other features will be implemented:

1. Standard altimeter setting (2,992) will be used at 18,000 feet (FL 180) and above instead of from 24,000 feet (FL 240 and above), as at present.

2. The Service Volume categories for VOR/VORTAC/TACAN facilities

have been revised for use in the modified airway/route system as follows:

Category

T (Terminal and Approach Aids)

L (Airways)

H (Jet Routes and above)

Frequency Protected Service Volume

25 n. miles up to 12,000 feet

40 n. miles up to 18,000 feet

130 n. miles up to 45,000 feet

100 n. miles above flight level 450

3. Additional airspace will be protected for IFR aircraft making turns of more than 45° in the low altitude structure. This is in recognition that an aircraft making a turn may exceed the boundaries of protected airspace provided for straight flight.

4. The next enroute low altitude charts will reflect the new revised widths of airways including the expanded width when the changeover point exceeds the distance of 51 nautical miles from the navigational aid serving that portion of an airway.

We are enclosing a brochure prepared by the Air Traffic Service of the Federal Aviation Agency which outlines the salient points in the modification of the airway/route system. We thought that you might be interested in further publicizing this information to all Montana pilots.

Sincerely yours,

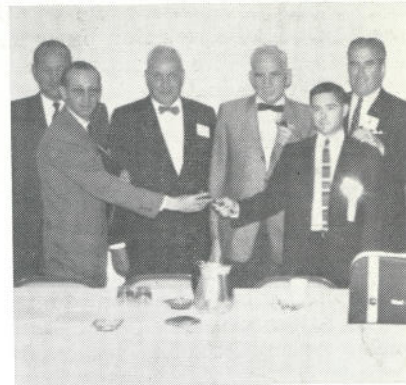
Charles S. Irwin

Chief, ARTCC (NOTIP)

Federal Aviation Agency, Great Falls Air Route Traffic Control Center.

INCA ELECTS NEW OFFICERS DURING SUCCESSFUL 1964 MEETING

Mr. Bert Zimmerly of Hillsboro, Oregon will take over the duties as President of the International Northwest Aviation Council for the coming year from re-tiring President Hugh Kelleher, Helena, Montana. Zimmerly was elected at the final business meeting Saturday afternoon of the 3-day Convention, September 24, 25 and 26, Helena, Montana. Mr. Olin Harrison, Portland, Oregon, was elected United States Vice-President and Mr. H. S. MacDonald, Vancouver, British Columbia, was elected Canadian Vice-President. The new president will appoint a secretary in his home town to succeed Kermit W. Anderson of Helena. Montana Directors are, newly elected Tom Palmer (two year term) and Mr. Charles



Mr. Hugh Kelleher hands over the gavel to incoming President Bert Zimmerly. (Back row: Howard Wilson, Pendleton, Oregon, director; L. S. "Doc" White, Oregon, director; Olin Harrison, Portland, Oregon, U. S. Vice President, elect; and H. S. MacDonald, Vancouver, B. C. Canadian Vice President, elect.)

A. Lynch (serving until 1965 on a two year term).

Registration was opened at 12:00 noon on Thursday, September 24th and continued throughout the day.

An Awards Breakfast was held at 8:30 A.M. on Friday morning honoring the past presidents: Mr. Tom Croson, Vice President, Public Relations for West Coast Airlines, was Chairman.

At 10:00 A.M. the Convention was officially opened by Mr. Hugh Kelleher, INAC President. The welcome addresses were given by Mr. Joe Flynn, Vice Chairman of the Joint City/County Airport Board of Helena, and Mr. Robert Wallace, Vice President of the Chamber of Commerce, Helena.

The Key Note speaker for the morning session was Col. John Vance, Helena, Commander of the Rocky Mountain Division of the Civil Air Patrol. Following the Key Note Address, Dr. Leslie L. Thomason, Director of Market Research Air Age Education and Training, Cessna Aircraft Company, gave an interesting presentation entitled "A Bigger Man in the Shrinking World!"

At the noon luncheon on Friday, Mr. Bert Zimmerly, INAC American Vice President, presented special guest, the Honorable Tim Babcock, Governor of Montana and the principal speaker, Mr. Donald Nyrop, President of Northwest Orient Airlines. Hertz Rent-A-Car was host for the Friday luncheon.

During the afternoon session en-

titled "Airlines Plans for the INAC Areas" a panel discussion included Mr. Ed Altman, Vice President, Community and Industrial Relations—U. S. Local Airlines Service; Vern A. Carlson, Assistant to the President, Frontier Airlines; Thomas M. Murphy, Director of State and Community Affairs—Western Airlines; George Brown, Jr., Director of Education for Weaver Airlines Personnel School, Inc.; Ronald Keith, Assistant to the President—Canadian Pacific Airlines, Vancouver; and Buzz Sawyer, Public Relations Officer, Air Canada, Vancouver.

The afternoon session entitled "General Aviation" was co-chaired by Bert Zimmerly, Vice President—INAC and Jack Daniels, INAC Director. The panel included Robert E. Monroe, Director of Aircraft Owners and Pilots Association from Washington, D. C. and Mr. George Ireland from the Flight Standards Division, FAA Central Region, Kansas City, Missouri, and Mr. Bill Paris, Secretary General, Royal Canadian Flying Clubs Association, Ottawa.

The theme of the "Canadian Night" banquet, held Friday evening, was "A Continental Approach to Commercial Aviation." The Master of Ceremonies was Mr. H. S. MacDonald, INAC Canadian Vice President. The principal speaker was Mr. A. S. McDonald, Senior Advisor to the Air Transport Board, Commission, Ottawa, Canada.

The Saturday sessions began at 9:30 a.m. The first panel, with Mr. Charles A. Lynch, Director of the Montana Aeronautics Commission acting as chairman and Robert W. Dunn, Director, State of Oregon Board of Aeronautics. Presentations were made by MAC staff members, Mr. Jim Monger, Assistant Director; Jack Wilson, Safety and Education Officer, and Mrs. Mary Jo Janey, Supervisor of Aviation Education. The late morning session entitled "Airport Management," chaired by Mr. Jack Daniels, INAC Director, featured Mr. Paul Dygert, Assistant Research Economist with the Institute of Transportation and Traffic Engineering, University of California, presenting a paper entitled "Toward a Theory of Airport Management." The Saturday noon luncheon was hosted by Avis Rent-A-Car. Mr. Vincent A. Carson, President of the American Association of Airport Executives and General Manager of the Newark New Jersey Airport, gave an interesting presentation.



Discussing the INAC '64 program are: Left to right; Charles A. Lynch; INAC Montana director, Hugh Kelleher, and INAC guest speakers, Donald Nyrop, Thomas M. Murphy and Wayne W. Parrish.

Afternoon session included "Airports and Their Problems" and co-chairmen were Ray Heinmeyer, Airport Manager, Bismarck, and Frank W. Phillips, Airport Manager at Tacoma. The panel was composed of Mr. Bill Lowe of Billings; Mr. Olin Harrison of Portland; Mr. Hugh D. Galusha, Jr., of Helena, and Mr. Vern A. Carlson of Denver, Colorado. The balance of the afternoon was spent in a business session.

The Saturday evening, "American Night," annual banquet began at 7:00 p.m. Mr. Thomas M. Murphy, Director of State and Community Affairs for Western Airlines from Los Angeles, was Master of Ceremonies, and Mr. Wayne W. Parrish, President and Editor of American Aviation Publication, Washington, D. C., was the principal speaker. Mr. Parrish spoke on the subject "Similarity of Problems in Aviation, 1937 to 1964."

There was a "fun filled" program for the ladies throughout the 3-day meeting. In addition to the joint Friday luncheon, and banquets on Friday and Saturday evenings—the ladies enjoyed a luncheon on Saturday afternoon at the Montana Club, Elizabeth Herrin, Chairman. Mrs. Elizabeth Castle presented "Can You Top This"—a hat showing that has become famous throughout the Northwest and was a highlight of the convention for the gals attending. From all reports—it's truly "hats off" to Bitty for a well planned program and a truly delightful time.

The Montana Chapter of the 99's held a luncheon with special guests, Grace Kuehn, Rosella Bjornson, Margaret Ross and Eleanor Bailey, four

women pilots from Lethridge, Alberta, Canada. Helena 99's in charge of the luncheon were; Mary Jo Janey, Elsie Childs and Helen Dunlop.

Mr. Hugh Kelleher has extended his heartfelt thanks to the Airport Sales Corporation of New York City for providing the coffee breaks and to the Montana Aeronautics Commission, the numerous individuals, firms and organizations, for their assistance and contributions to the meetings.

The Commission wishes to congratulate Mr. Kelleher for the excellent job in planning and conducting the '64 Convention—it undoubtedly ranks among the top for successful INAC Conventions.

DEDICATION OF SEELEY LAKE AIRPORT HELD

The new, 3,500 foot, Seeley Lake Airport was dedicated on Saturday, September 19. The \$25,000 project was sponsored by Missoula County through the Montana Aeronautics Commission's General Aviation Utility Airport Program. Property for the project was donated by the State Forestry Department and local private property owners.

Flying conditions were ideal on dedication day, and a wide variety of aircraft were among the 28 planes flown in for the occasion, ranging from an Ercoupe to DC2's and including AT-6; Fairchild 24; Curtiss Travel-Air, Beechcraft, Bonanza S 35; Queen Air, J-3's; Taylorcrafts, Pipers and Cessna's.

Among those attending the ceremonies were Al Martinson and Dick Gies two local property owners donating land for the airport, Paul Vick, Missoula County Surveyor; Bill Wen-

zel, Consulting Engineer and Walter Laas, Contractor on the project.

Two surprise, but very welcome visitors, were former Governor Hugo Aronson and flying in from Pasadena, California in her Beechcraft Bonanza, Mrs. Nina Stoehr. Mrs. Stoehr, a San Gabriel Valley 99's member, began her flying at the age of 62 and now, at 74, has logged approximately 2,000 hours.



Lt. to rt. Ex-governor Aronson, Bill Wenzel, director Lynch and Mr. Paul Vick.



Mrs. Stoehr visiting with Mr. and Mrs. Jack Stevenson of Missoula. Mrs. Stoehr arrived in her Beechcraft Bonanza which is christened "Stoehr-way to the Stars II."

Representing the MAC were Director Lynch; Commissioners Mr. Clarence Anthony, Helena; Mr. Jack Hughes, Missoula; Mr. Ted Cogswell, Great Falls; Assistant Director Jim Monger, Advisor Frank Wiley, Safety and Education Officer, Jack Wilson, Chief Pilot, Bill Wyman; Engineers Vern Moody and Worthie Rancher; and Jerry Burrows who handled the photography for the Commission.

Addressing the crowd during the ceremonies were Mr. William Lucier,



Aircraft departing from Seeley Lake Airstrip.

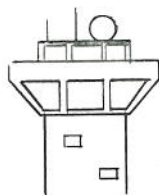
Chairman of the Missoula County Board of Commissioners and Mr. Richard Duncan, President of the Seeley Lake Businessmen's Association. MAC Director Lynch and Mr. Monger spoke on how the airport at Seeley Lake came into being and the formalities required in order to construct this particular type of General Utility Airport.

It is the consensus that the new Seeley Lake Airport will undoubtedly rank as one of the top in traffic for recreational airstrips during the summer months.

The Montana Army Guard from Helena gave an aerial demonstration with 2 helicopters and 5 L-19's as a conclusion to the program.

The crowd of approximately 175 persons then enjoyed looking over the aircraft and visiting with friends.

All considered the dedication a truly great success and a good time was had by all.



TOWER

OPERATIONS

MONTANA TOWER-CONTROLLED AIRPORT OPERATIONS

	Total Operations	Instrument Operations
Billings	8,380	670
Great Falls	8,727	712
Missoula	6,903	189
Helena	1,230	76

THE WHY'S OF WINTER WEATHER IN MONTANA

By Arthur L. Jacobson
Aviation Forecaster

Weather Bureau Airport Station
Great Falls, Montana

Winter weather will soon be upon us. The hazards which attend light aircraft operations will rapidly increase with this change of season. All of us, pilots as well as forecasters, need to be alerted to the problems of icing, turbulence, frontal weather, and to the decrease in the hours when visual flying across mountainous terrain is possible.

Fronts from the Pacific are usually our first concern and these increase in frequency during October. Pacific cold fronts often occur in series and will at times cross the state at 24 to 36 hour intervals. They generally produce strong gusty surface winds and turbulence east of the Continental Divide. The cloudiness which accompanies them can make visual flying westward across the mountains very marginal. The strongest winds usually begin about 4 to 6 hours before the surface front arrives and are associated with an upper front which precedes the main front. The upper front produces an increase in high cloudiness which, in most cases, decreases again before the surface front arrives. The moist and cold Pacific air becomes very unstable when it flows over warm ground. Therefore, showery weather may accompany the

front as it moves across eastern Montana. Do not be misled by the fact that these snow showers and squalls, which may give ceilings and visibilities near zero, often occur between our widely spaced reporting stations. All Pacific fronts should be respected because of this variability of weather which accompanies them.

Frequent and prolonged periods of fog and low stratus set in west of the Continental Divide in November and December during the periods between Pacific Fronts. The first night of fog usually comes after a period of rain followed by rapid clearing. Fog tends to persist during the period when a high pressure ridge with light surface winds remains over the mountainous area. A Pacific front with strong winds will usually clear out the fog, though on some days the fog will dissipate for a short period during the afternoon only to reform again during the evening. It is possible to fly above this condition as the tops of the fog and stratus rarely exceed 5,000 feet above mean sea level. A more hazardous condition even for large aircraft, occurs when the upper front, which precedes the Pacific cold front, produce rain which falls through the fog. When freezing temperatures exist in the valley, freezing rain may produce heavy icing.

Toward the end of October or in early November, we can expect our first real Arctic outbreak accompanied by temperatures near or below zero, considerable snow and strong northerly winds. As the northerly winds turn toward the northeast they become more upslope and low ceilings may persist for several days. When the cold high pressure area, which usually moves southeastward behind the Arctic front, becomes centered well to the southeast of Great Falls southwesterly winds set in east of the Continental Divide and rapid clearing occurs.

Here are some simple rules that pilots might find helpful when planning flights this winter.

(1) Arctic cold fronts usually move southward following a period of above normal temperatures. In fact, the outbreak follows the warmest day more frequently than not.

(2) The Arctic front will not pass Great Falls until the altimeter reading at Cut Bank is higher than at Great Falls.

(3) The greater the difference between the Helena altimeter reading

and that at Great Falls, the stronger will be the southwesterly winds along the eastern slopes of the Rockies provided that the pressure is higher at Helena. The strong southwesterly winds blow even when there is fog and low stratus in the western valleys. (We often complain about the strong and gusty winds, but the pressure field which causes them helps to decrease the length of our cold periods by producing the chinook winds.)

(4) The stronger the surface wind, especially if it is gusty, the stronger will be the turbulence near the ground.

(5) The upper air turbulence over the mountains depends upon the strength of the upper air winds and the stability of the air mass. Significant turbulence usually does not occur unless the winds at the elevation of the mountain tops exceed 35 knots.

(6) The most dangerous icing conditions usually occur when there is a moist air mass together with turbulence and a freezing level which is about 5,000 feet above the surface.

(7) Very low temperatures on the surface are not conducive to heavy icing for it is necessary that there be some source of water droplets and this requires temperatures near or above freezing.

(8) Beware of carburetor icing in a moist air mass even at temperatures well above freezing.

This article is intended to help keep you up in the air, with plenty of terrain clearance as many days as possible this winter.

GENERAL AVIATION'S NATIONAL EMERGENCY ROLE DESCRIBED IN NEW FAA GUIDE

First copies of a Federal Aviation Agency planning emergency guide outlining the use of privately-owned aircraft during a national emergency were presented to civil aviation leaders today by FAA Administrator N. E. Halaby in a special ceremony at the Agency's Washington headquarters.

In presenting the group copies of the 150-page publication, "State and Regional Defense Airlift (SARDA) Planning" Mr. Halaby said, "This new guide is the first comprehensive publication designed to aid civil defense agencies at all levels in developing effective airlift methods that require private aircraft in time of emergency."

"The non-air carrier civil aviation fleet of some 83,000 active aircraft constitutes one of the nation's most valued resources. In time of emergency, this fleet provides unparalleled flexibility and utility in airlifting people, cargo and medical supplies, as well as performing other vital services."

The SARDA planning guide was prepared with the cooperation of the White House Office of Emergency Planning, Office of Civil Defense, Office of Emergency Transportation and others that would be involved in civil defense and recovery operations. Special provision is made in the guide for continuing general aviation flying during an emergency to meet priority business and personal needs.

Of the 83,000 planes that might be available to assist the nation to recover from a major attack, approximately 41,000 are single engine 4-place or larger aircraft. The others include 32,000 3-place or smaller single engine planes, 9,000 multi-engine aircraft, and 1,000 helicopters and other rotorcraft.

The wide geographical dispersal of this fleet is highly advantageous from the standpoint of surviving an attack. Further, most of these planes could operate out of airfields that would need only a minimum of preparation or restoration. These aircraft also would be able to land on unprepared strips and roadways, as well as operate in and out of disaster areas barring radiation hazards. Rotorcraft would have an even greater flexibility requiring only a relatively few feet of clear area for landing or take-off.

General aviation missions would include airlift of critical personnel and supplies, airborne appraisal of disaster areas, area radiological monitoring and courier flights.

The FAA is charged by Executive Order with developing plans covering the emergency management of the nation's non-airline civil aircraft, civil airports and other civil aviation facilities and services. Such plans are coordinated with other agencies concerned to assure that national, state and local requirements are satisfied. FAA also has the job of making sure that civil aviation's needs in logistic support are met in such areas as air traffic priorities, manpower, fuels and maintenance.

The official yell of the school of experience is "Ouch!"

HARLO FLY-IN/GOLF SUCCESSFUL!!

Harlowton's Fly-In-Play Golf and breakfast, held on September 13th, attracted 25 aircraft, approximately 40 fliers and numerous drive-in visitors for the day. The breakfast was excellent and a number enjoyed spending their day on the golf course.

Congratulations and a hearty thanks goes to the members of the Chamber of Commerce, Kiwanis and Country Club for their planning and arrangements and to the persons preparing the breakfast.

Among those flying in were: the Lynchs of Billings, Jack Willis, Billings; Suzanne Ward, Clyde Park; Jim Moore, Two Dot; Charles W. Karinen and son, Livingston; Ray Skovgaard and sons, Billings; Don Overcast, Chinook, and Stanley Cavill and his wife, residing in Hamilton since his retirement as Chief Pilot for Western Airlines, and Mr. and Mrs. Bob Baxter. Bob is another of Harlo's early day fliers. Stan and Bob spent a great deal of time recalling early day aviation in Montana.



MAC Chairman, Gordon Hickman and Harlowton Airport manager, Ed Mielke.

MAC Chairman Gordon Hickman, of Harlowton, was on hand to greet Commission representatives; member, Ted Cogswell, of Great Falls; Director Lynch; Chief Pilot, Bill Wyman, a Harlo native; and engineer Vernon Moody. Vern departed that afternoon with the Special Award for engineering. Special awards were also presented to Charlie Reiste and Floyd Tueder of Great Falls, for having flown in the oldest ship (1946 Er-



Harlowton Fly-In Group: Left to right: Stan Cavill, Mr. Cavill, Bob Baxter, Mrs. Baxter. Far left — MAC Engineer Vern Moody and Commission Chairman, Gordon Hickman. The man on the roof is Mr. Bill Sanders who did a fine job of handling the UNICOM!

coupe); Mr. and Mrs. Stan Cavill for traveling the greatest distance; and the Chinese flyer award, (Wun Wing Lo) went to D. B. Malcom, of Deer Lodge.

With a perfect, sunny, windless day—good food and pleasant company the day added up to a Wonderful Time!!!

It can be said that Harlowton can truly be proud of its airport improvements and the persons who so conscientiously promoted and accomplished its being.

HAVE YOU READ?

The article in the September issue of the "Humble Extra" published by the Humble Oil & Refining Company, (Page 6), applauding Homer Holman and the staff of the Skyway Flying Service in Great Falls, for their actions during the Montana flood disaster in June. The article relates how Homer and his staff of 24 employees, working around the clock (Skyway pilots logged over 150 hours in the cockpit) did a tremendous job of "spotting" for the rescue helicopters, being credited for saving countless lives and playing a key role in the cleanup operations.

This is a fine article giving well deserved praise to one of our Montana Flight Operators.

You'll never get started if you keep waiting for perfect conditions.

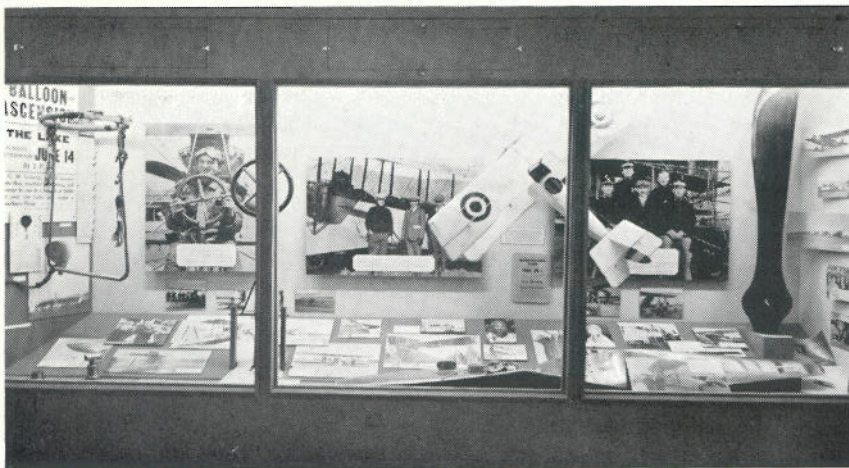
MONTANA AVIATION HISTORY EXHIBIT

**Frank W. Wiley
Commission Advisor**

The aviation project which is being developed by former Commission Director, Frank W. Wiley, is sponsored jointly by the Montana Historical Society and the Montana Aeronautics Commission. A biography on each of some two hundred pilots and an extensive picture collection is being placed on files of the State Historical Library. Microfilm records have been made of much of this material.

This history project includes the recording and documentation of aviation material pertaining to flying in Montana over the half-century period between 1880 and 1930. A manuscript of the activities of Montana aviation people and events is being written and documented and will be published in book form. Much of this material has been obtained from research of the extensive newspaper files in the State Historical Library. Montana fortunately has a historical file of the many news papers published the last one hundred years. The State Historical Library has received national recognition for the completeness of these newspaper files, which are invaluable documentary material.

There is a general interest throughout the country in aviation history material, as indicated in Montana by the antique airplane buffs like Melvin



Montana Aviation History Exhibit — State Historical Library, Helena.

Lindgren, Clarence Anthony and Nelson Story, who have restored stick and fabric aircraft to mint condition. North Dakota, our neighbor to the east, has an excellent exhibit in the capitol building at Bismark, of aviation material pertaining to the activities of Ben Eilson, who probably was North Dakota's most famous aviator. Additional aviation historical material in North Dakota includes a Ryan monoplane which has been restored and is on permanent exhibit on the Minot Air Force Base. This Ryan airplane built in 1927, was the first monoplane to be flown in Montana and was originally owned by the Westland Oil Company of Scobey, Montana.

The aviation history project includes a collection of aviation artifacts which has recently been put on exhibit in the State Historical Museum. If you should happen to be in Helena, you are cordially invited to visit your State Historical Museum and see that aviation exhibit, which is on the third floor of the Veterans-Pioneers Memorial Building.

Nothing Can Happen!

The completely automatic airplane —automatic pilot and all—started its maiden flight with an announcement describing the wonders of automation. Then came a second announcement.

"This is your captain speaking. The management wants to assure you this pioneer flight is completely safe. There is no chance of anything going wrong. Since everything is automatic nothing can happen, can happen, can happen, can happen."

CONGRATULATIONS!



CERTIFICATES ISSUED RECENTLY TO MONTANA FLYERS

- | | |
|---|---|
| Wayman, John A.—Billings—
Comm. and Instrument | Sundhaim, JuDean Parnal—
Fairview—Private |
| Thompson, James R.—Miles City—
Student | Riemann, Theodore Frank, Jr.—
Billings—Student |
| Stoddard, J. Lawrence—Baker—
Student | Forbes, Clarence Raymond—Billings
—Student |
| Lawrence, Robert B.—Billings—
Flight Instr. | Dernbach, Stephen A.—Lewistown
—Comm. |
| Bornheim, Edwin A.—Lewistown—
Student | Lavallee, Joseph N.—Glasgow—ATR |
| Theade, Donald E.—Billings—
Student | Dennis, Glenn D.—Hardin—Student |
| Milligan, Glen E.—Glendive—
Student | Coatney, William B.—Arkansas—
Student |
| Moen, Kenneth O.—Sidney—Private | Amiel, David—Billings—Private |
| Jones, William J.—Billings—
Student | Conlin, Michael M.—Williston, N.D.
—Comm. |
| Habel, Clifford Jr.—Billings—
Student | Jackson, Thomas D.—Idaho Falls—
Flight Instr. |
| Creek, Lloyd D. Sr.—Billings—
Student | Raney, Jacob L.—Big Timber—
Student |
| Cline, Theodore R.—Hardin—
Student | Omdahl, Clarke A.—Billings—
Student |
| West, Richard D.—Miles City—
Student | Rush, Weldon M.—Scobey—
Flt. Instr. |
| Riley, Dorothy J.—Sheridan, Wyo.
—Student | Eaton, Robert T.—Billings—Student |
| Haskell, Thales A.—Lovell, Wyo.—
Student | Craig, Michael M.—Billings—
Student |
| Paine, Hobart J.—Billings—Student | Rowland, H. Binney—Billings—
Mechanic Examiner |
| Ayers, Wayne D.—Grass Range—
Student | Morehouse, Wallace D.—Glasgow—
Student |
| Bailey, Ronald R.—Sidney—Private | Brenden, Richard J.—Nashua—
Student |
| | Metzler, Wesley J.—Powell, Wyo.
—Private |
| | McLaughlin, Howard A.—Tacoma,
Washington—Comm. |
| | Tolbert, James L.—Billings—Private |
| | Holler, Roger D.—Cody—Private |
| | Granley, Newil S.—Canada—ATR |
| | Brogan, Michael M.—Billings—
Instr. on Flt. Instructor |
| | Lowe, George M.—Lovell, Wyo.—
Student |
| | Harvey, Douglas W.—Dillon—
Student |
| | Swartz, Marjorie G.—Missoula—
Student |
| | Young, Virgil C.—Missoula—Student |
| | Dawson, James L.—Missoula—
Student |
| | Dunnell, John G.—Missoula—
Student |
| | Moore, Dale G.—Missoula—AMEL
added to Private |
| | Davis, Jeffery R.—Missoula—Seat
type added to Sr. Para. Rig.
Back/chest |
| | Callum, David R.—Missoula—Seat
type added Sr. Para. Rig.
Back/chest |
| | Lonnevik, Dennis F.—Conrad—
Student |
| | Darcy, James L.—Helena—Airframe
Mechanic added to Powerplant |

Nelsen, Larry D.—Missoula—Seat type added to Sr. Para. Rig Back/chest
 Seven, Muril G.—Power—Student
 Cockrell, Richard—Galata—Private
 Retzlaff, Frank A.—Great Falls—Student
 Timm, Glenn L.—Polson—AMEL added to Com.
 Colby, Robert D.—Kalisepll—COMM.
 Small, Francis X.—Berkeley, Calif.—Student
 Hodge, Ludwig G.—Helena—Student
 Mayes, James E.—Missoula—Private
 Giles, Thomas W.—Missoula—Student
 Stetson, Frederick A.—Missoula—Student
 Lovell, Virgil L.—Anaconda—Private
 Horstman, Gerald R.—Polson—Private
 Hopkins, Janine C.—Helena—Private
 Hamby, Canny B.—Beaumont, Tex.—Commercial
 Cannon, Thomas C.—Great Falls—Student
 Luke, Ralph I.—Polson—Student
 Ibey, Daniel P.—Dillon—Commercial
 Eisenman, Larry K.—Missoula—Seat type added to Sr. Para. Rig. Back/chest
 Baker, Michael C.—Santa Barbara, Calif.—Seat type added to Sr. Para. Rig. Back/chest
 Little, Guy Richard—Great Falls—Student
 Hall, Kemper W.—Great Falls—Student
 Clark, Don E.—Big Fork—Rotorcft. added to Com. Instr. & Flt. Instr. Rtr. crft.
 Eichhorn, Peter—Saddle River, N.J.—Private
 Eaton, Billy B.—Three Forks—Student
 Ball, Evy J.—Great Falls—Student
 Schneider, Fred—Townsend—Private
 Scotten, Geo. F.—Great Falls—Student
 Keefe, Kenneth W.—Missoula—Student
 Kenna, Howard F.—Livingston—Student
 Mellberg, Carl L.—Great Falls—Student
 Castillo, Gregorio—Great Falls—Instr. added to Com. ASMEL-DC-3
 Caspers, Wesley—Dillon—Student
 Scheiner, James J.—Great Falls—Student

Melvin, Russell C.—Great Falls—Student
 MacDuffie, Joyce S.—Helena—Private
 Ebaugh, Harold C.—Havre—AMEL added to Commercial
 Orgin, Rodney Frank—Great Falls—Student
 McClanahan, Shirley M.—Great Falls—Student
 Gliko, Anthony R.—Belt—Student
 Christ-Janer, Edward P.—Great Falls—Private
 Valentine, Jerry G.—Conrad—Private
 Keck, Donald J.—Great Falls—Private
 Squire, Donald M.—Missoula—Private
 Warren, Conrad K.—Deer Lodge—Commercial
 Johnson, Harold M.—Missoula—Student
 Schauf, Steve L.—Park—Student
 Happ, Robert W.—Kalispell—Student
 Bellmore, James M.—Kalispell—Student
 Koch, Gerald A.—Missoula—Student
 Potter, David Edgar—Whitefish—Student
 Ramos, Richard F.—San Antonio, Texas—Student
 Mercer, William D.—Kevin—Student
 Walters, Joseph L.—Gladstone, Oregon—Student
 Lough, Charles F.—Colorado—Student
 Anderson, Orvis B.—Missoula—Student
 McGill, Merle D.—White Sulphur Springs—Student
 Larsen, Harold H.—Missoula—Student
 Koch, Dorothy A.—Missoula—Student
 Jones, Patsy J.—Missoula—Student
 Michel, Kenneth Roger—Dutton—Student
 Crissey, Donald R.—Livingston—Student
 Stanley, William C.—Missoula—Student
 Martin, Ronald Louis—Missoula—Student
 King, Charles L.—Great Falls—Student
 Ashcraft, Larry C.—Helena—Student
 Wegner, Melvin D.—Helena—Student
 Flynn, Michael T.—Great Falls—Student
 Hesler, Curtis J.—Missoula—Student
 Peterson, James G.—Missoula—Student

Hill, Merrill J.—Missoula—Student
 White, Charles I.—Bozeman—Student
 Tubbs, William J.—Helena—Student
 Nye, Stanley R.—Missoula—Grumman TBM added to Com.
 Palmer, Jessie M.—Missoula—Private
 Linkewich, Alexander—Red Deer, Alta—Com. Grumman TBM
 Christensen, Robert P.—Missoula—Private
 Dehn, Karl J.—Power—Private
 Burke, Patricia A.—Manhattan—Private
 Gets, Clarence D.—Missoula—Private
 Howard, Charles R.—Hungrey Horse—Private
 Timm, Elizabeth A.—Polson—Private
 Sanderson, Robert L.—Stevensville—AMEL added to Com.
 Holms, Allan G.—Missoula—AMEL added to Private
 Komberec, Richard C.—Drummond—Private
 Speacht, Wm. H. Jr.—Chinook—Private
 Fowell, Michael R.—Great Falls—Com.
 Lingscheit, Richard J.—Great Falls—Private
 Hopkins, Ben B.—Helena—Private
 Good, Garth C.—Missoula—Grumman TBM added to Com.
 Priv. on ATR, ASMEL
 Dolan, Chester D.—Missoula—Grumman TBM added to Com.
 Priv. on ATR, AS & MEL
 Newcomb, Thomas P. Jr.—Great Falls—Private
 Rock, Robert S.—Missoula—Private
 Brown, Kenneth C.—Great Falls—Private
 Greenheck, Robert R.—Philipsburg—Private
 Harris, Raymond E.—Wtaskiwin, Alta.—Spec. Purpose Certif.
 Timm, Phillip E.—Polson—Instr. added to Flt. Instr.
 Jennings, Gordon A.—Penhold, Alta.—Com.
 Hache, Joseph E.—Moose Jaw, Sask.—Com. and Instrument
 Dodd, Reginald E.—Grants, New Mex.—Com.
 Lutz, Stephen D.—Denver—AMEL added to Com.
 Ricks, Leon B.—Missoula—Student
 Nelson, Roger W.—Great Falls—Student
 Kozich, George J.—Great Falls—Student
 Lorenzen, Jerry C.—Great Falls—Com.
 Jennings, Gordon A.—Strathmore,

Quebec—Instr. added to Com.
Higgins, Terry T.—Great Falls—
Flight Instructor
Johnson, Leo E.—Missoula—Private
Orr, Gary W.—Big Fork—Flt.
Instr.—Rotorcraft
Schendel, Dale W.—Missoula—Com.
Freeman, James K.—Warm Springs
Student
Davis, Bob F.—Butte—Private
Hart, James A.—Missoula—Student
Anders, Jon D.—Big Fork—Student
Hoffman, Wayne D.—Helena—
Basic Ground Instr.
Carson, Daniel F.—Helena—Private
Goerke, John L.—Bozeman—Student
Torgerson, Leroy K.—Cut Bank—
Basic Ground Instr.
Walter, Virgil A.—Kalispell—
Student
Purdy, Glenda L.—Missoula—
Commercial
Lindberg, Arnold A.—Cut Bank—
Flt. Instr.
Stanton, Leroy W.—Great Falls—
Instr. rating added to Com.
James, Gordon R.—Penhold, Alta.—
Com.
McIntosh, Donald G.—Great Falls—
Student

James, Gordon R.—Alta, Canada—
Instr. added to Com.
Monforton, Donald P.—Bozeman—
Flight Instructor



FEDERAL AVIATION AGENCY ITINERARY LISTING

Airport	Oct.	Nov.	Dec.
Bozeman	15	12	10
(Gallatin Field)			
Culbertson	7		2
Glasgow		4	
Glendive			16
Great Falls	8	5	3
(International)			
Lewistown	21	18	
Miles City		19	17
Missoula	22		
Sidney		19	

NOTE: Provisions have been made to give private pilot written examinations on an appointment basis only at the following FAA Flight Service Stations:

Bozeman	Lewistown
Butte	Livingston
Cut Bank	Miles City
Dillon	Missoula

Ernest Tooke of Ekalaka, Montana is new Eastern Montana dealer for Maule Aircraft. Will Trade and sell all types of used aircraft. Can Finance to 60 months. Will send literature on request. See—Flying T Aircraft Sales, Ekalaka, Montana.

FOR SALE: Late 1958 Cessna Skylane 182—196 hrs on \$2,000 chrome major by Mercury Aviation, Minnesota. 37 hrs on factory overhaul prop—1,166 total time. Full IFR equipped with 6 cyl. primer, cyl. head temp. gauge—rotating beacon—2 month old new Narco Mark IV with Omni. LFR-3. New heavy duty nose gear—New tires, brake blocks and disc. Interior and exterior in perfect condition. License to May 11, 1965. PRICE \$9,750.00. Will deliver for expenses. CONTACT John Bragg, 19 Carol Lane, Livingston, Montana. Phone 222-2990.

It Happened in October:

1906—October 5. Wright Brothers achieve their longest flight to date: 24.2 miles in 38 minutes, 3 seconds at Dayton, Ohio.

1922—October. A world's speed record of 222.96 mph for 1 kilometer is set by Brig. Gen. W. Mitchell flying in the Curtiss Racer in which Lt. R. L. Maughan won the Pulitzer Trophy Race with a speed of 205.8 mph over a 250-kilometer course.

1941—October. Civil Aeronautics Board amends Civil Air Regulations to require certification of every pilot and aircraft in the U.S. regardless of whether or not they are engaged in commercial activities. (As of October—there are 91,442 civilian pilots).

MEMBER NATIONAL ASSOCIATION OF STATE AVIATION OFFICIALS

PURPOSE:—"To foster aviation as an industry, as a mode of transportation for persons and property and as an arm of the national defense; to join with the Federal Government and other groups in research, development, and advancement of aviation; to develop uniform laws and regulations; and to otherwise encourage co-operation and mutual aid among the several states."

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